

IN THE SPECIFICATION

Please replace the paragraph at page 1, lines 5-9, with the following rewritten paragraph:

This application is a continuation of U.S. application serial no. 09/718,483 filed November 24, 2000, and is based upon and claims the benefit of priority from the prior Japanese Patent Application No. 11-333433, filed November 24, 1999, the entire contents of each of which are incorporated herein by reference.

Please replace the paragraph at page 1, lines 12-17, with the following rewritten paragraph:

The present invention relates to an exhaust apparatus for a process gas, which is used in combination with a process apparatus for forming [[a or]] a layer on an object to be processed using the process gas, and relates to a method of removing an impurity gas (unprocessed gas, non-reacted process gas) formed by a process gas.

Please replace the paragraph at page 16, lines 10-21, with the following rewritten paragraph:

To the deposition of the Ti film generally consumes approximately 10% of the TiCl_4 gas, and the remaining gas (about [[96%]] 90%) as a non-reaction gas and reaction by-products of TiCl_2 , TiCl_3 and HCl are fed into the exhaust pipe 30 from the exhaust ports 28 together with the exhaust gas by the vacuum pump 33. The exhaust gas further flows down in the order of the trap mechanism 32, the vacuum pump 33 and the eliminator 34. In this case, the non-reacting TiCl_4 gas, and the reaction by-products, have a relatively high vapor pressure, which are not generally possible to be sufficiently removed by the trap mechanism 32.

Please replace the paragraph at page 25, lines 8-21, with the following rewritten paragraph:

Second exhaust valves 150A, 150B are provided between the nozzle 162 and the upstream flange joint 146, and the downstream flange joint 148 and the vacuum pump 134 respectively. An exhaust bypass pipe 152 having a bypass valve 154 disposed therein is provided to communicate the bypass exhaust port 124 of the process container 106 with the portion 130A or the exhaust pipe 130 directly downstream of the second exhaust valve ~~[[150]]~~ 150B. The inner diameter of the exhaust bypass pipe 152 is, for example, 20 mm, significantly smaller than the inner diameter of the exhaust pipe 130 which carries out main exhaust. The process container 106 can be therefore evacuated with a large inverse diffusion coefficient as will be discussed later.

Please replace the paragraph at page 25, line 22, to page 26, line 15, with the following rewritten paragraph:

Oxidative-gas feeding means 160 is connected to that portion of the exhaust pipe 130 which is located directly downstream of the first exhaust valve 140. Specifically, this oxidative-gas supply means 160 comprises a gas injection nozzle 162 whose distal end is inserted into the exhaust pipe 130 through the peripheral wall thereof, an oxidative gas pipe 164 connected to the nozzle 162, and an oxidative gas source 166. The gas injection nozzle 162 and the exhaust pipe 130 may be those illustrated in FIGS. 4A, 4B and 4C may be used. An oxidative gas valve 168 and a flow controller ~~[[170]]~~ 179, which controls the flow rate of the oxidative gas, are disposed in order in the oxidative gas pipe 164. Any gas which oxidizes and stabilizes a reaction by-product can be used as the oxidative gas. Although the O₂ gas is used in this embodiment, another gas, such as O₃ (ozone), a gas containing dry-air

O₂ or H₂O (water vapor), can be used as well. The nozzle 162 may be provided in the trap mechanism 132 so as to directly feed the oxidative gas into the trap mechanism 132.

Please replace the paragraph at page 31, lines 15-19, with the following rewritten paragraph:

Next, the second exhaust valves [[150]] 150A, 150B at the near the trap mechanism 132 are closed (S8), and both valves 142 and 144 at the upstream of the trap mechanism 132 are closed, sealing the trap mechanism 132 airtight and isolate it (S9).

Please replace the paragraph at page 34, lines 7-8, with the following rewritten paragraph:

Note that the downstream valve 144 may be closed, instead of closing the second exhaust valve [[150]] 150B.